WHAT IS CLAIMED IS:

- 1. A soft removable thermal shield for protecting a heat-sensitive element of a projectile, comprising:
- (a) a main body configured to:
 - cover at least part of a window of the projectile, the element being disposed behind said window;
 - (ii) thermally protect the element during at least part of a flight of the projectile; and
 - (iii) be sufficiently soft upon being released from the projectile during said flight that said main body is substantially harmless to the projectile after being released; and
- (b) an attachment arrangement for releasably connecting said main body to the projectile.
- 2. The thermal shield of claim I, wherein said main body includes an ablative material.
- 3. The thermal shield of claim 2, wherein said ablative material is ablative rubber.
- 4. The thermal shield of claim 1, further comprising:
- (c) a reinforcement of said main body.

- 5. The thermal shield of claim 4, wherein said reinforcement includes at least one layer of textile fabric.
- 6. The thermal shield of claim 1, further comprising:
- (c) a protective layer that is disposed adjacent to said window when said main body is operationally connected to the projectile, wherein a coefficient of friction between said protective layer and said window is sufficiently low to allow said main body to release substantially easily from said window and to leave said window substantially clean of a residue of said main body.
- 7. The thermal shield of claim 6, wherein said protective layer includes at least one layer of glass fiber fabric.
- 8. The thermal shield of claim 1, wherein said attachment arrangement includes at least one cord, said at least one cord having two ends, one of said ends being configured for attachment to said main body, and another of said ends being configured for attachment to the projectile.

9. The thermal shield of claim I, wherein said attachment arrangement includes at least one cord, said at least one cord having two ends and a middle section, at least part of said middle section being mechanically connected to said main body, each of said two ends being configured for attachment to the projectile.